

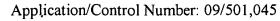
# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/501,045	02/09/2000	Glenn T. Colon-Bonet	10971158-1	3338	
22879	7590 10/30/2003		EXAMINER		
HEWLETT	PACKARD COMPANY	DO, CHAT C			
P O BOX 27	72400, 3404 E. HARMONY	ROAD			
INTELLECTUAL PROPERTY ADMINISTRATION			ART UNIT	PAPER NUMBER	
FORT COL	LINS, CO 80527-2400		2124		
			DATE MAILED: 10/30/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	_			Q		
	Application No.		Applicant(s)			
'Office Action Summany	09/501,045		COLON-BONET, GL	ENN T.		
Office Action Summary	Examiner		Art Unit			
The MAIL INC DATE of this accomplisation and	Chat C. Do		2124			
The MAILING DATE of this communication app Period for Reply	oears on the cover	sneet with the co	orrespondence addr	ess		
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, howe y within the statutory min will apply and will expire , cause the application to	over, may a reply be time imum of thirty (30) days SIX (6) MONTHS from to become ABANDONED	ely filed will be considered timely. he mailing date of this come (35 U.S.C. § 133).	munication.		
1) Responsive to communication(s) filed on 21 A	<u> August 2003</u> .					
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-fi	nal.				
3) Since this application is in condition for allows				merits is		
closed in accordance with the practice under <b>Disposition of Claims</b>	Ex parte Quayle,	1935 C.D. 11, 4:	53 U.G. 213.			
4)⊠ Claim(s) <u>1,2,4,7,8,10 and 11</u> is/are pending in	the application.					
4a) Of the above claim(s) is/are withdraw	wn from consider	ation.				
5) Claim(s) is/are allowed.				•		
6)⊠ Claim(s) <u>1,2,4,7,8,10 and 11</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election require	ment.				
Application Papers						
9) The specification is objected to by the Examine						
10) The drawing(s) filed on is/are: a) accept		-				
Applicant may not request that any objection to the 11) The proposed drawing correction filed on		·-	• •			
If approved, corrected drawings are required in re		• • • • • • • • • • • • • • • • • • • •	ved by the Examiner.			
12) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign	n priority under 35	5 U.S.C. § 119(a)	-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:		,				
1.☐ Certified copies of the priority document	s have been rece	ived.				
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the prio application from the International Bu</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 1	17.2(a)).		age		
14) Acknowledgment is made of a claim for domesti		•		nnlication)		
a) The translation of the foreign language pro	ovisional applicati	on has been rece	eived.	F 12.1.2.2.19.19.		
Attachment(s)	py allaor o					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	4)	-	(PTO-413) Paper No(s) atent Application (PTO-			



" Art Unit: 2124

### **DETAILED ACTION**

- 1. This communication is responsive to Amendment D, filed 8/21/2003.
- 2. Claims 1-2, 4, 7-8, and 10-11 are pending in this application. Claims 1 and 7 are independent claims. In Amendment D, claims 1, 4, 7-8, and 10-11 are amended. This Office Action is non-final.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-2, 4, 7-8, and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1, the limitation "add the separate propagate, kill, and generate bits of the third propagate, kill, and generate recoded number representation" in lines13-15 is unclear whether the separate propagate, kill, and generate bits are the bits of the result from the first carry-save adder or are another separate bits not from the first carry-save adder. For examination purposes, the examiner considers this limitation as "add the third propagate, kill, and generate bits recoded number representation from the first carry-save adder". Claim 7 has the same problem.

Thus, claims 2, 4, 8, and 10-11 are also rejected for being dependent on the rejected base claims 1 and 7.

" Art Unit: 2124

### Claim Rejections - 35 USC § 102

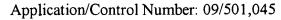
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-2, 4, 7-8, and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Bradley (U.S. 6,496,846).

Re claim 1, Bradley discloses in Figure 1 an apparatus for performing the addition of PKG recoded numbers (abstract) comprising: a circuitry (102) configured to receive at least a first operand and a second operand (A and B from 0<sup>th</sup> to 7<sup>th</sup> bits), the first and second operands comprising respective first and second PKG recoded number representations (output of 106-1 encoder) of respective first and second binary operands; a first carry-save (col. 1 lines 65-66) adder (107-1, 108-1, and 109-1 in 105) configured to add first operand and second operand to generate a PKG recoded number presentation (PKGin according to col. 4 lines 42-48 expressions), and a modified carry-save (col. 1 lines 65-66) adder (106) configured to receive the third PKG recoded number representation (PKGin as input to 106), add the separate PKG of the third PKG recoded number representation, and generate a sum (SUMH and SUML in 106) and a carry value (PKG0 in 105).

Re claim 2, Bradley further discloses in Figure 1 sum and carry are dual rail encoded value (col. 1 line 46).



Art Unit: 2124

Re claim 4, Bradley further discloses in Figures 2A-2B the circuitry is configured to receive and apply a carry-in value (Cin) to the modified carry-save adder.

Re claim 7, it is a method claim of claim 1. Thus, claim 7 is also rejected under the same rationale in the rejection of rejected claim 1.

Re claim 8, it is a method claim of claim 4. Thus, claim 8 is also rejected under the same rationale in the rejection of rejected claim 4.

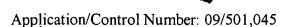
Re claim 10, it is a method claim of claim 2. Thus, claim 10 is also rejected under the same rationale in the rejection of rejected claim 2.

Re claim 11, it is a method claim of claim 1. Thus, claim 11 is also rejected under the same rationale in the rejection of rejected claim 1.

## Response to Arguments

- 7. Applicant's arguments filed 8/21/2003 have been fully considered but they are not persuasive.
  - a. The applicant argues in pages 8-9 for claim 1 that the cited reference does not disclose the limitations in the amended claims, particularly the first carry-save adder and the modified carry-save adder.

The examiner respectfully submits that the rejection above under 102 is clearly cited each individual limitation that the cited reference has. In addition, the cited reference discloses first carry-save adder (105 to generate PKGin) configure to add first and second operands (e.g. PKG0 and PKG1) to generate a third PKG recoded number representation (e.g. PKGin1) and a modified carry-save adder is



" Art Unit: 2124

discloses in part 106 and Figures 2A-2B wherein the adder adds the PKGin and Cin to generate the sum and carry out in dual rail.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (703) 305-5655. The examiner can normally be reached on M => F from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Chat C. Do Examiner

Art Unit 2124

October 24, 2003

TODD INGBERG PRIMARY EXAMINER